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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/759,721	01/12/2001	Yeong-Taeg Kim	SAM1.0082	2444

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EXAMINER	
BELIVEAU, SCOTT E	
ART UNIT	**PAPER NUMBER**
2614	

DATE MAILED: 01/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/759,721	KIM, YEONG-TAEG	
	Examiner	Art Unit	
	Scott Beliveau	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 January 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *1/11/01*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed 11 January 2002 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered unless otherwise noted.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: "301" (Figure 3) and "450" (Figure 4). Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "800" (Page 19, Line 11), "310" (Page 26, Line 22), and "417" (Page 28, Line 24). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to because:

- Element "430" in Figure 4 is shown as representing the "Audio/Video Bitstream of BC" from the storage device, but is described in the specification as being the "selected audio/video bit stream" which is fed to the "Audio/Video Decoder" [409] (Page 29, Lines 14-15). Accordingly, it would appear that the element arrow should reference the information flow between the "Selector" [408] and the "Audio/Video Decoder" [409];
- The label "Rendered Banner Information" [428] in Figure 4 should read "Rendered Background Commercial Banner Information" [428] in order to be consistent with the specification (Page 29, Lines 15-19);

- The label "Rendered Banner Information" [528] in Figure 5 should read "Rendered Background Commercial Banner Information" [528] in order to be consistent with the specification (Page 31, Lines 5-9);
- The label "Rendered Banner Information" [628] in Figure 6 should read "Rendered Background Commercial Banner Information" [628] in order to be consistent with the specification (Page 34, Lines 1-5).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

6. The disclosure is objected to because the Brief Summary of the Invention is not a general statement of the invention as set forth in 37 CFR 1.73. In particular, the summary appears to primarily comprise a verbatim recitation of the presented claims and as such does not quickly and readily apprise the public as to what the invention entails given. Furthermore, the brief summary comprises 10 pages or approximately 1/3rd of the entire application and as such does not appear to describe the subject matter of the invention in one or more clear, concise sentences or paragraphs as prescribed in MPEP § 608.01(d). Appropriate correction is required.

Claim Objections

7. Claim 11 is objected to because of the phrase "the agreement" lacks proper antecedent basis. Appropriate correction is required. For the purpose of art evaluation, it shall be presumed that the claim is dependent upon claim 10.

8. Claim 11 is objected to because of the phrase "end user's" should read "end users". Appropriate correction is required.

9. Claim 16 is objected to because of the phrase "the signal reflective of the regular program" and "the signal reflective of the Banner Information" lacks proper antecedent basis. Appropriate correction is required. For the purpose of art evaluation, it shall be presumed

that the claim has been amended to read "the first signal reflective of the regular program" and "the second signal reflective of the Banner Information".

Claim Rejections - 35 USC § 112

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 16-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, the scope of the claim is unclear as to a lack of antecedent basis for the recited limitation of "means for receiving the signal reflective of the at least one Background Commercial and providing a signal reflective of the Banner Information". The claim recites the reception of a combined digital signal having information reflective of a regular program and Banner Information which is subsequently decoded in order to provide a "first signal reflective of the regular program" and a "second signal reflective of the Banner Information". Accordingly, it is unclear as to where "the signal reflective of the at least one Background Commercial" is introduced such that it is referencing the "first signal", "the second signal" or some other signal not recited. For the purpose of art evaluation, the examiner shall presume that the "Background Commercial" has been amended to reference the "regular program" in a manner consistent with the disclosed embodiment for which claims 1-15 are directed.

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

13. Claims 1, 9, 12, and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Butler et al. (US Pub No. 2002/0007493 A1).

In consideration of claim 1, Figure 1 of the Butler et al. reference illustrates a "digital video service network" [10] comprising a "means for providing a combined digital signal" [12] having "information reflective of a regular program signal" and a "Banner Information signal" or ancillary data in the form of HTML advertisement overlays (Para. [0004], [0015], and [0020]) via a "channel" (Para. [0013]). The aforementioned, "combined digital signal" is subsequently "received" via a "receiver" with an associated "presentation unit" or display [68] which "presents . . . the Banner Information . . . with the regular program" (Para. [0004] and [0036]).

In consideration of claim 9, Figure 4 of the Butler et al. reference discloses a "method for providing digital television programming to viewers" comprising "creating a combined digital television signal which combines information reflective of regular programming" [220] and "information reflective of Banner Information" [226] which is subsequently "transmitted . . over a channel" (Para. [0013] and [0050] – [0053). The aforementioned "transmitted, combined digital signal" is subsequently "received" [230] at a "receiver" [14] (Figure 5) and are "provided to a presentation unit" [68] such that the "information reflective

of the regular programming and the information reflective of the Banner Information are displayed simultaneously on the presentation unit" (Para. [0004] and [0036]).

Claim 12 is rejected wherein the user is "provided a receiver . . . which specifically enables the simultaneously display of the Banner Information and the regular programming on the presentation unit" in connection with the necessary hardware to receive and decode DBS signals (Para. [0002]).

Claim 16 is rejected in view of the aforementioned rejection of claims, wherein Figure 2 of the Butler et al. reference particularly illustrates a "receiver for an interactive digital video service network" [14]. The "receiver" comprises "means for receiving a combined digital signal . . . having information reflective of a regular program and Banner information" [58], "means for decoding the combined digital signal and providing a first signal reflective of a regular program and a second signal reflective of the Banner Information" [66/68], "means for receiving the 'first' signal reflective of the at least one 'regular program' and providing a 'second' signal reflective of the Banner Information" and "means for providing a video output signal . . . combining the information from the 'first' signal reflective of the regular program and the 'second' signal reflective of the Banner Information" [66/68] (Para. [0004] and [0036]).

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

15. Claims 2-8, 13-15, and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Butler et al. (US Pub No. 2002/0007493 A1) in view of applicant's admitted prior art (APA) relating to the MPEG-2 Standard.

In consideration of claim 2, the Butler et al. reference discloses the particular usage of MPEG-2 in connection with the "providing" / distribution [12] of the combined digital signal (Para. [0015]). The reference, however, does not explicitly disclose details associated with the implementation of the standard including the creation of a "TS packetized" stream. Applicant's admitted prior art discloses that the particular usage of TS packetization as defined in the MPEG-2 Standard is well known in the art (IA: Page 18, Lines 18-20). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made so as to "create a TS packetized combined digital signal" in connection with complying with the MPEG-2 standard for the inherent advantages associated with such including providing the robustness necessary for noisy channel distribution such as those employed by satellite distribution.

In consideration of claims 3 and 15, as aforementioned, the Butler et al. reference particularly discloses the usage of the MPEG-2 in connection with the distribution of a multiplexed digital signal. The reference, however, does not particularly disclose the details pertaining to the construction of a TS in accordance with the MPEG-2 standard (Para [0015]). Applicant's admitted prior art discloses that the MPEG-2 standard discloses details pertaining to the packetizing, multiplexing and sending of coded bit streams of multiple programs wherein multiple programs with audio and video overlays may be transmitted by a

service provider and received by the end user (IA: Page 3, Lines 4-10). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to particularly utilize "a first coding unit for coding the regular program signal and a second coding unit for coding the Banner Information signal, a first TS packetization unit for receiving the coded regular program signal and providing a packetized bit stream reflecting the coded regular program signal and a second TS packetization unit for receiving the coded Banner Information signal and providing a packetized bit stream reflecting the coded Banner Information signal, a TS Packet multiplexer for receiving the packetized regular program signal and the packetized Banner Information signal and providing a multiplexed transport stream" for the purpose of providing a means so as to facilitate the encoding, packetizing, multiplexing, and providing of an MPEG-2 TS in accordance with the MPEG-2 standard and the associated inherent advantages associated with such including the ability to distribute video with improved error resilience plus the ability to carry multiple programs simultaneously without requiring a common time base..

With respect to the particular limitation of a "channel modulation unit for modulating the transport stream into the combined digital signal and sending the combined digital signal for transmission to the channel", the Butler et al. reference implicitly comprises such given that the receiver utilizes a particular channel for the reception of the combined stream (Para. [0032]) and the source distributes the content over a particular channel (Para. [0013]).

In consideration of claims 4-7, 13, 14, and 17-20, as aforementioned the Butler et al. reference discloses the particular usage of the MPEG-2 standard in connection with the processing of the received data wherein the particular utilization of a "TS packetized"

streams in accordance with the standard would have been an obvious modification in order to provide the robustness necessary for noisy channels distribution channels such as those employed by satellite distribution. As illustrated in Figure 2, the "receiver" [14] further implicitly employs the claimed means for the purpose of demodulating, demultiplexing, depacketizing, decoding, and rendering an MPEG-2 packetized TS for the purpose of rendering the received MPEG-2 TS in accordance with the MPEG-2 standard. In particular, the receiver comprises a "channel demodulation unit for demodulating the received combined digital signal and extracting bit streams of the regular program signal and the Banner Information signal from a user-tuned channel" [60], "a TS demultiplexing unit for demultiplexing the regular program bitstream and Banner Information TS packets from the signal received from the channel demodulation unit" [60], "a Banner Information TS depacketizer for receiving the Banner Information TS packets from the TS demultiplexing unit and depacketizing the Banner Information TS packets to provide a coded Banner Information signal" [66], "a Rendering Unit for decoding and rendering the coded Banner Information into a bitmap video signal" [66], "a video reconstruction unit for receiving the rendered Information bitmap video signal and creating an output for the presentation device" [66], "Audio/video decoders for receiving the regular program bitstream from the TS demultiplexing unit . . . decoding audio and video coded bit streams of the regular program signal . . . [and] sending an Audio output signal for transducing into sound and a decoded video signal to the video reconstruction unit" [66], "the video reconstruction unit reconstructing an output video signal from the decoded video output and the rendered Banner Information bitmap video signal . . . [and] sending the video output signal" [66] to "the video

presentation device" [68] for "display where the regular program and the Banner Information are displayed simultaneously" (Para. [0032] – [0039]).

In consideration of claim 8, the claimed limitation do not set forth any over and above those addressed in the combined rejections of claims 1, 3, and 4 and is accordingly rejected as previously set forth. In particular, Figure 1 of Butler et al. illustrates a "digital video service network" [10] comprising a "means for providing" [12], a "receiver" [14], and a "channel for communicating the combined digital signal from the means for providing" (Para. [0013]).

16. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Butler et al. (US Pub No. 2002/0007493 A1).

In consideration of claims 10 and 11, the Butler et al. reference does not explicitly disclose the particular usage of "entering into an agreement with end-users which allows for" the aforementioned "simultaneous display of the Banner Information and the regular programming on the presentation unit" wherein "the agreement provides for a limitation on the subscription charged to the end user. The examiner takes OFFICIAL NOTICE that the existence of service agreements (ex. quarterly/monthly/yearly subscriptions) that "allow" viewers to watch distributed programming and "provide for a limitation on the subscription charged to the end user" is notoriously well known in the art of video distribution and in particular DBS services utilized by Butler et al. For example, services provides such as DirectTV® and DishNetwork® routinely establish service agreements whereby access to distributed program content is limited to those users which pay a certain fixed monthly fee. Accordingly, it would have been obvious to one having ordinary skill in the art at the time

the invention was made to modify Butler et al. so as to employ the aforementioned service agreements for the inherent advantages associated with such including the ability of the service provider to profit from the distributed video programming.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure as follows. Applicant is reminded that in amending in response to a rejection of claims, the patentable novelty must be clearly shown in view of the state of the art disclosed by the references cited and the objections made.

- The Mao et al. (US Pub No. 2003/0115612 A1) reference discloses a digital TV system that distributes synchronized WWW content.
- The Knudson et al. (US Pat No. 6,564,379) reference discloses a technique for the distribution of interactive banner information/advertisements.
- The Ebisawa (US Pat No. 5,886,731) reference discloses a video data receiving apparatus wherein viewers may watch programs with or without commercials based upon a fee structure.
- The Picco et al. (US Pat No. 6,029,045) reference discloses a system for inserting local content into programming.
- The Kitsukawa et al. (US Pat No. 6,282,713) reference discloses a system and method for on-demand electronic advertising.
- The Blahut et al. (US Pat No. 5,532,735) reference discloses a method whereby viewers are allowed to select a level of advertising based in order to realize programming discounts.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Beliveau whose telephone number is 703-305-4907. The examiner can normally be reached on Monday-Friday from 8:30 a.m. - 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on 703-305-4795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

SEB
January 3, 2005